

## ABSTRACT

### MAGNETIC HEAD HAVING SHORT POLE YOKE LENGTH AND METHOD FOR FABRICATION THEREOF

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The induction coil of the magnetic head of the present invention is fabricated in a  
5 patterned electrical insulation material, preferably utilizing reactive ion etch (RIE) techniques.  
The electrical insulation material is particularly patterned such that it is formed away from the  
ABS surface and in the location of the induction coil. A fill layer is deposited around the  
patterned electrical insulation material layer, such that the fill layer is disposed at the ABS  
surface. In a preferred embodiment, the patterned electrical insulation material is initially  
10 fabricated from hard baked photoresist and subsequent to the deposition of the fill layer the hard  
baked photoresist material is removed and replaced by  $\text{SiO}_2$ . The  $\text{SiO}_2$  is thereby located away  
from the ABS surface and the induction coil is subsequently fabricated within the  $\text{SiO}_2$  material.